

Remarks

Claims 1-6 were pending in the subject application. By this Amendment, claims 1 and 4 have been amended and claim 3 has been canceled. Support for the amendments to the claims can be found throughout the subject specification and in the claims as originally filed (see, for example, original claim 3 and page 5, line 32 through page 6, line 2). Entry and consideration of the amendments presented herein is respectfully requested. Accordingly, claims 1, 2, and 4-6 are currently before the Examiner. Favorable consideration of the pending claims is respectfully requested.

The amendments to the claims have been made in an effort to lend greater clarity to the claimed subject matter and to expedite prosecution. These amendments should not be taken to indicate the applicants' agreement with, or acquiescence to, the rejections of record. Favorable consideration of the claims now presented, in view of the remarks and amendments set forth herein, is earnestly solicited.

Claims 1-6 have been rejected under 35 U.S.C. §103(a) as obvious over Xu *et al.* (U.S. Patent Application No. 2003/0154659) in view of Li (U.S. Patent Application No. 2002/0173252) and Akahori *et al.* (U.S. Patent Application No. 2004/0147206). The applicants respectfully traverse this ground for rejection because the cited references, either taken alone or in combination, do not teach or suggest the subject invention.

Xu *et al.* disclose a polishing composition for silicon semiconductor wafers. The Office Action, at page 3, cites paragraph [0018] of Xu *et al.* and asserts that the composition is dispersed and that improvements in dispersing can be accomplished using a "dispersant (i.e. a surfactant)." However, the applicants respectfully point out that Xu *et al.* state in paragraph [0018] that "dispersing or dissolving these components is optional" and is accomplished "by stirring by a vane-type stirring machine or by ultrasonic dispersion." Thus, contrary to the Office Action's assertion, there would be no reason for a skilled artisan to include a dispersant in the composition of Xu *et al.* since dispersion is not required. Even if one of skill in the art were to create the Xu *et al.* composition and desired dispersion, Xu *et al.* teach that such dispersion is achieved by stirring or ultrasonic dispersion. There is no suggestion at all of the use of a dispersant or a surfactant anywhere in the Xu *et al.* reference.

While Li discusses some advantages of using a surfactant, the surfactant of the claimed invention is not disclosed. Additionally, the applicants respectfully point out that Li teaches that ionic surfactants, as opposed to nonionic surfactants, should be used when attempting to improve the stabilization of a slurry. The claimed invention, on the other hand, utilizes a nonionic surfactant.

Akahori *et al.* disclose a chemical-mechanical polishing abrasive with cerium oxide slurry particles having low hardness. In contrast, both the present invention and Xu *et al.* deal with silica particles, which are quite different from cerium oxide particles in several ways, including hardness. It is well established in the patent law that the mere fact that the purported prior art could have been modified or applied in some manner to yield an applicant's invention does not make the modification or application obvious unless "there was an apparent reason to combine the known elements in the fashion claimed" by the applicant. *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 127 S.Ct. 1727 (2007). In this case, a skilled artisan would not have found a reason to combine a surfactant disclosed in Akahori *et al.* with the composition of Xu *et al.* since each reference uses a different particle type with its slurry.

Even if it is assumed, for the sake of argument, that a skilled artisan had a reason to combine Xu *et al.*, Li, and Akahori *et al.*, the claimed invention would still not be taught or suggested. Claim 1, as amended, requires that the polyoxyethylenealkylamine ether-based nonionic surfactant be specified by formula (1) given in claim 1. There is no disclosure or suggestion in any of the cited references of this surfactant. Instead, this critical element of the claimed invention is absent from the combination of Xu *et al.*, Li, and Akahori *et al.* Thus, the cited references cannot lead to the claimed invention without the use of hindsight reconstruction, which cannot support a §103 rejection, as was specifically recognized by the CCPA in *In re Spinnoble*, 56CCPA 823, 160 USPQ 237, 243 (1969).


As discussed above, a skilled artisan would not have had a reason to use a surfactant, including one disclosed in Akahori *et al.*, in the Xu composition. However, even if the cited references are combined, there is no suggestion of the surfactant of formula (1) in claim 1. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing remarks and the amendments to the claims, the applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

The applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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